Urban Forest Mapping Project

www.urbanforestmap.org
www.sftreemap.org

Getting to the root of it . . .

- What are the needs?
- Collective Collaborative Intelligence
- Open Source Tree Maps
- San Francisco Example
- Beyond the map
- The big picture

What are the needs?

It all started with a seed . . .

Cities search for new ways to assess the urban environment

green space

is

infrastructure

Federal and state agencies look for new ways to properly manage natural resources

. . . and reduce paperwork

Across the planet, our resources are being depleted

It is a time of economic challenge for agencies and municipal governments

But in the virtual world of 2nd Life, people are making money grow on trees

But we all know that in the real world, money can't grow on trees!

Or can it?

Over the past 30 years, 20 Million trees have been planted by volunteers

The CRITICAL questions . . .

1. How can we maximize the power of volunteerism?

2. How can we measure the impact planting 20 million trees?

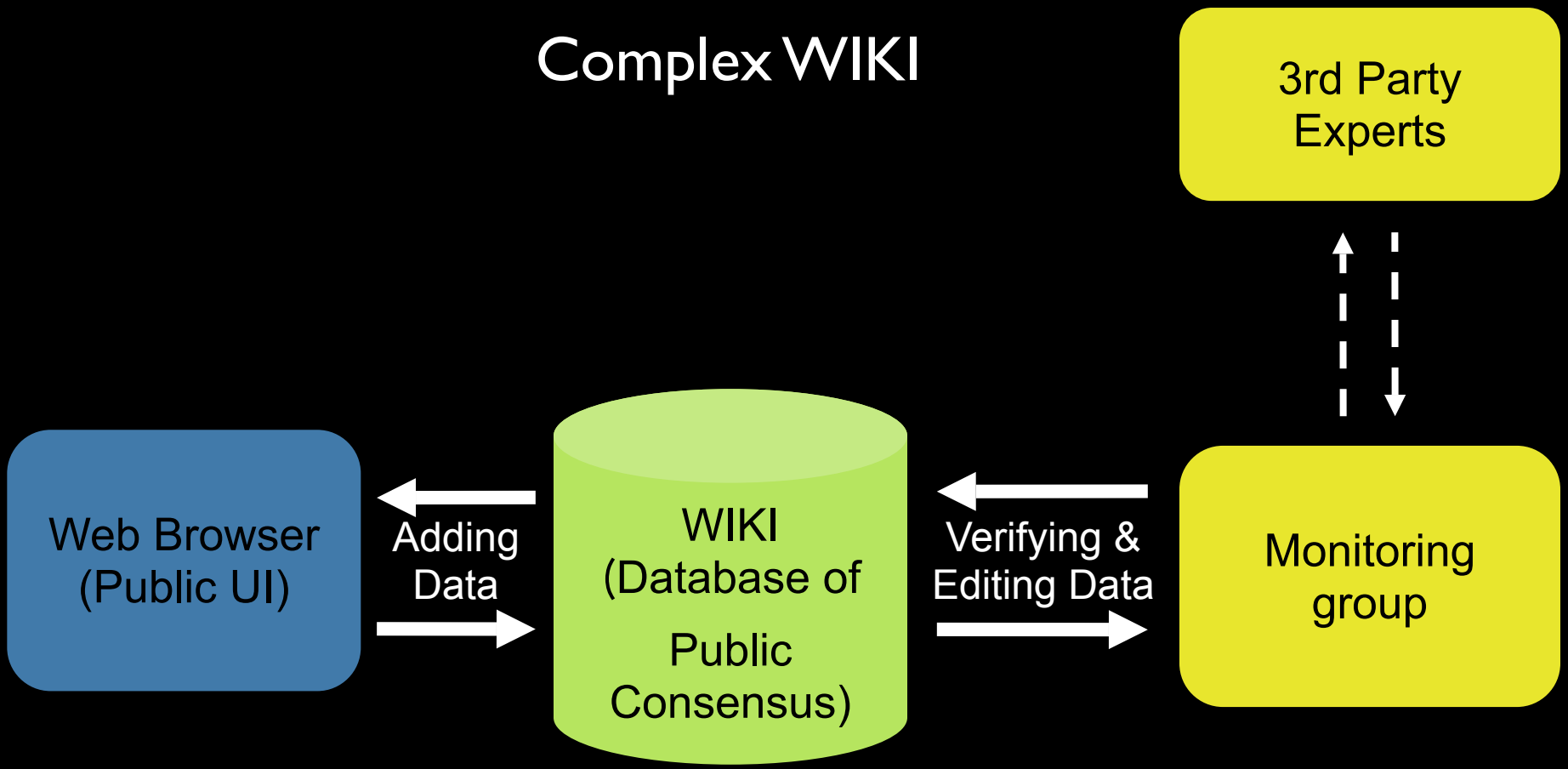
Collective Collaborative Intelligence

(WIKI)

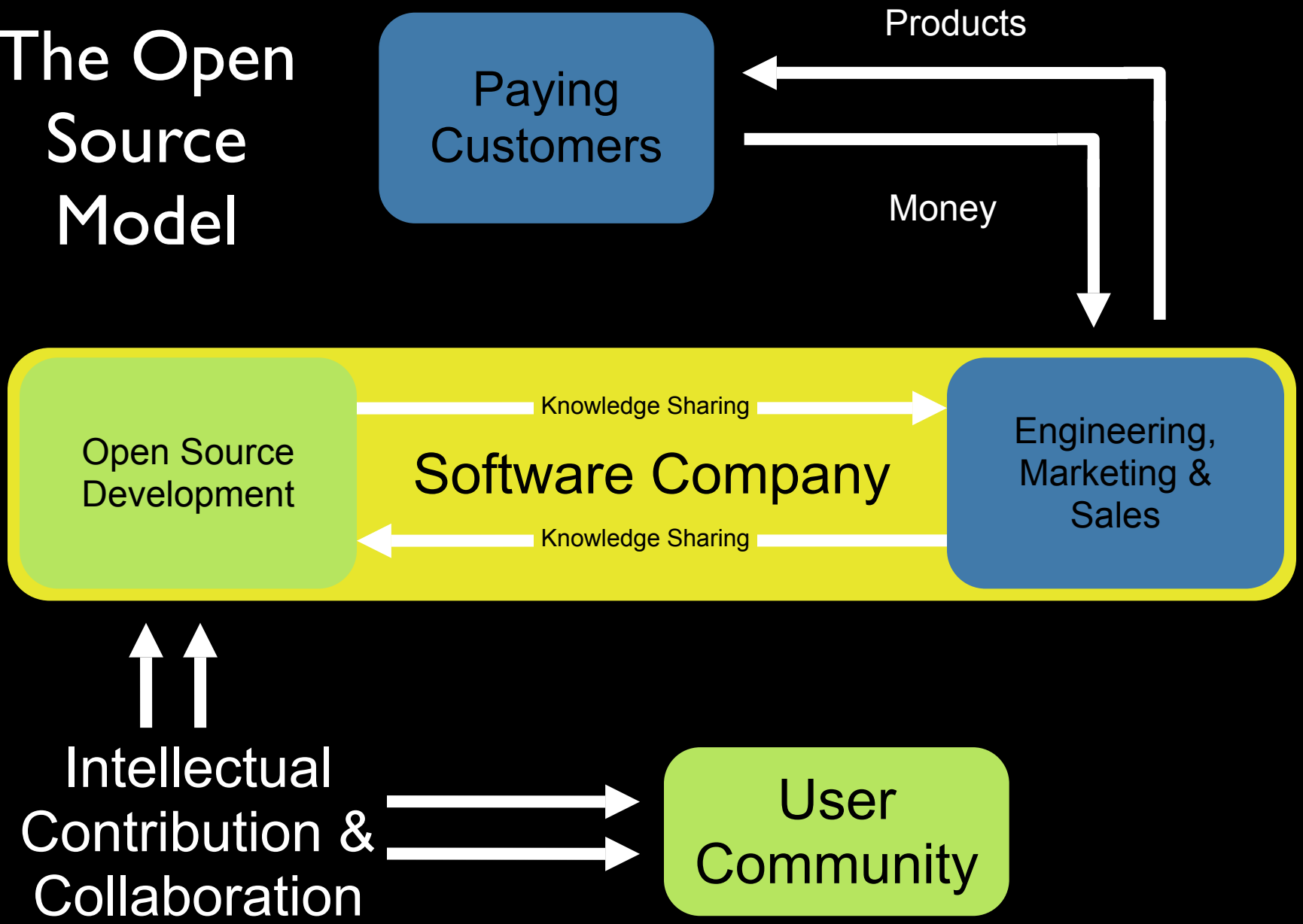
Simple WIKI

self perpetuating natural system

Complex WIKI



The Open Source Model

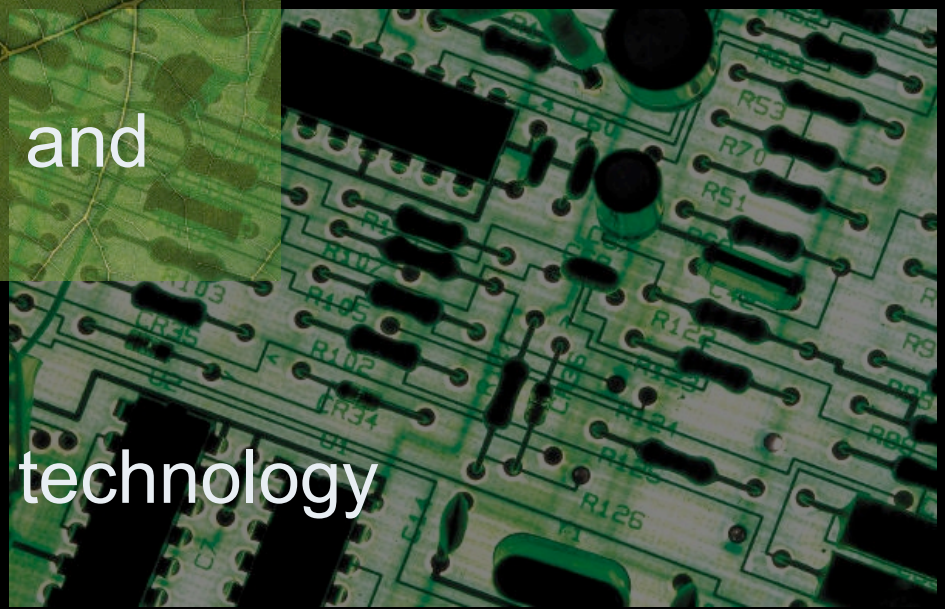


Open Source Community Tree Maps

Revolutionary information sharing for conserving natures' assets

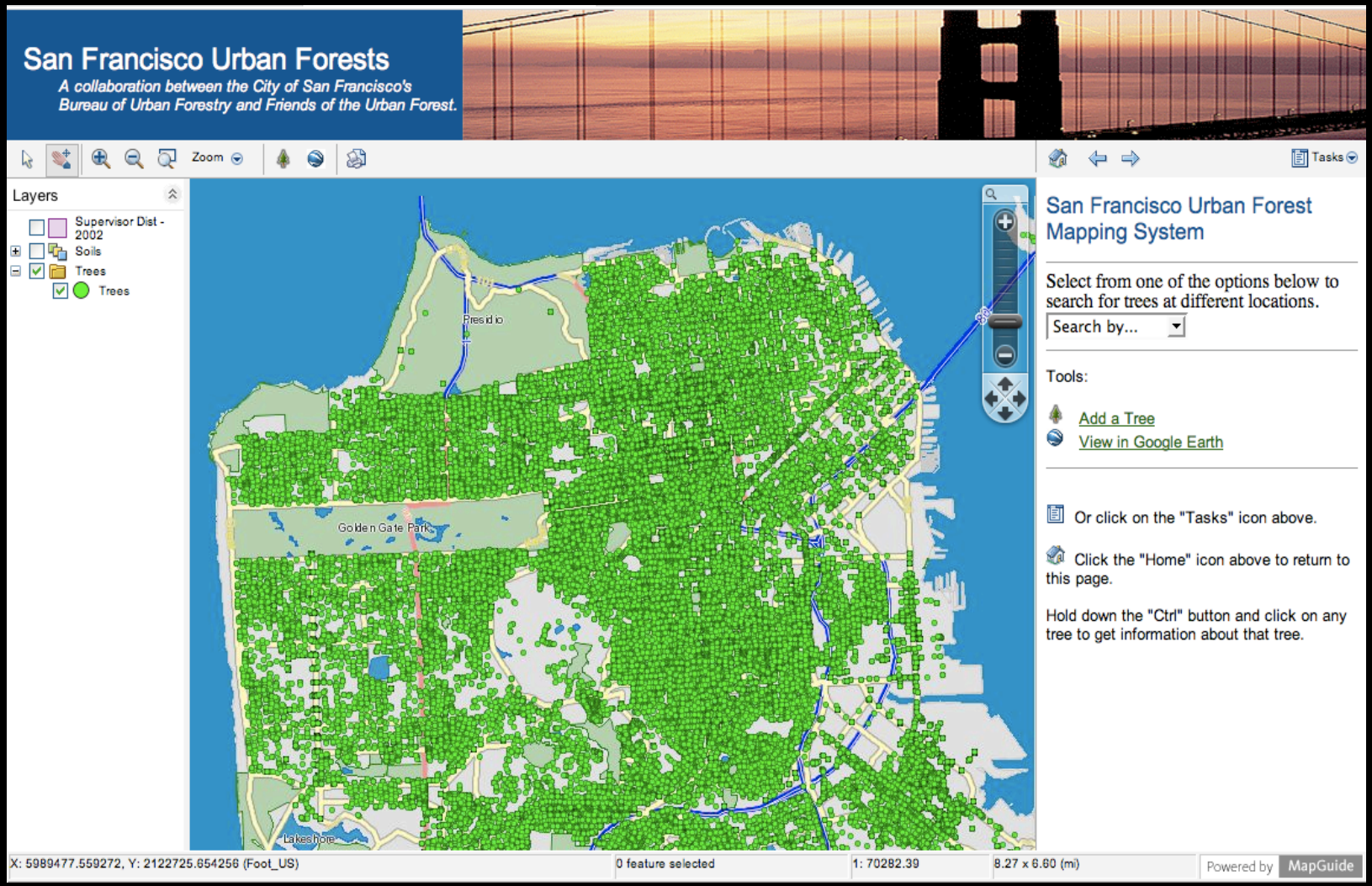
We are revolutionizing info sharing by integrating

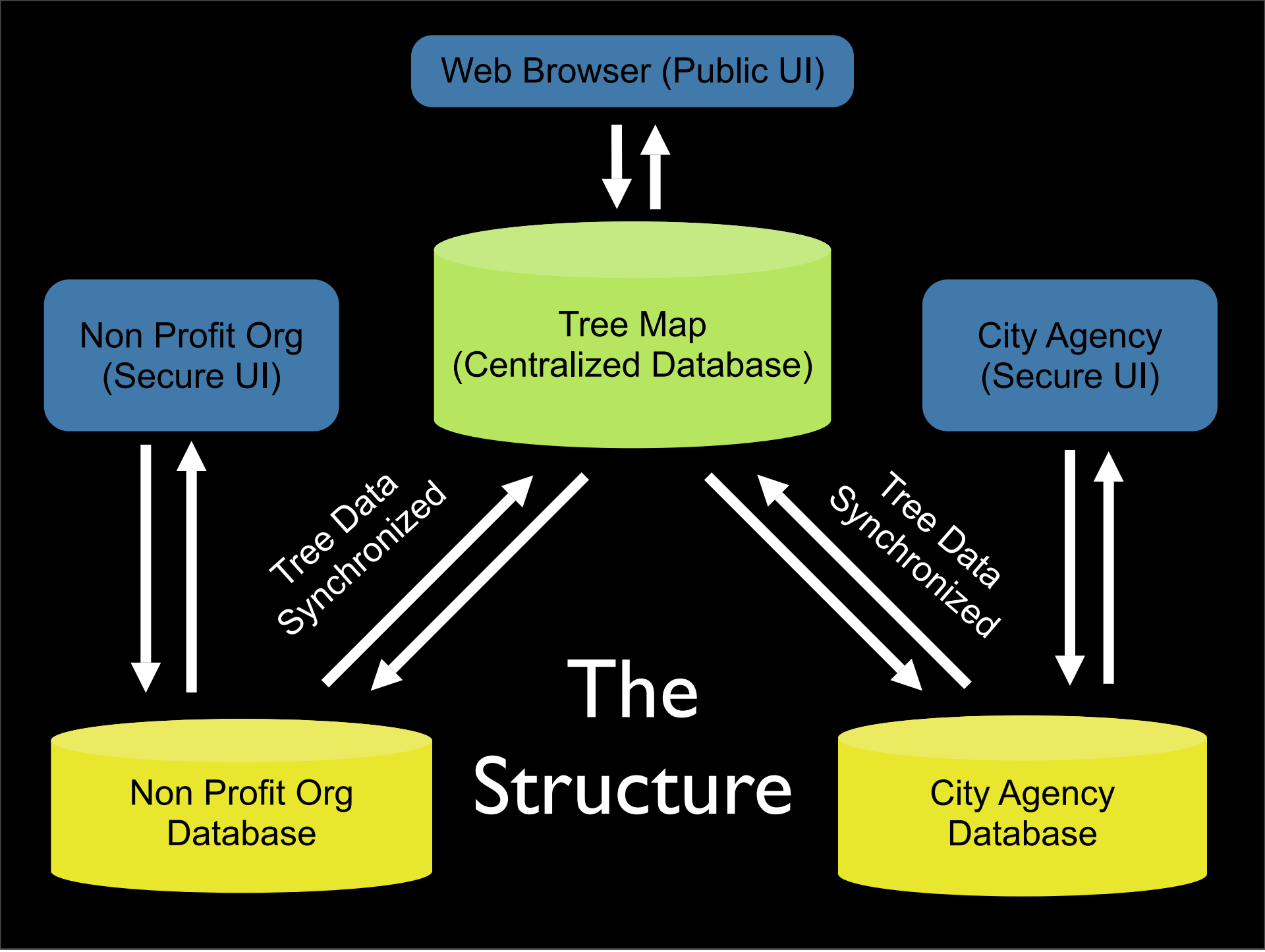
and



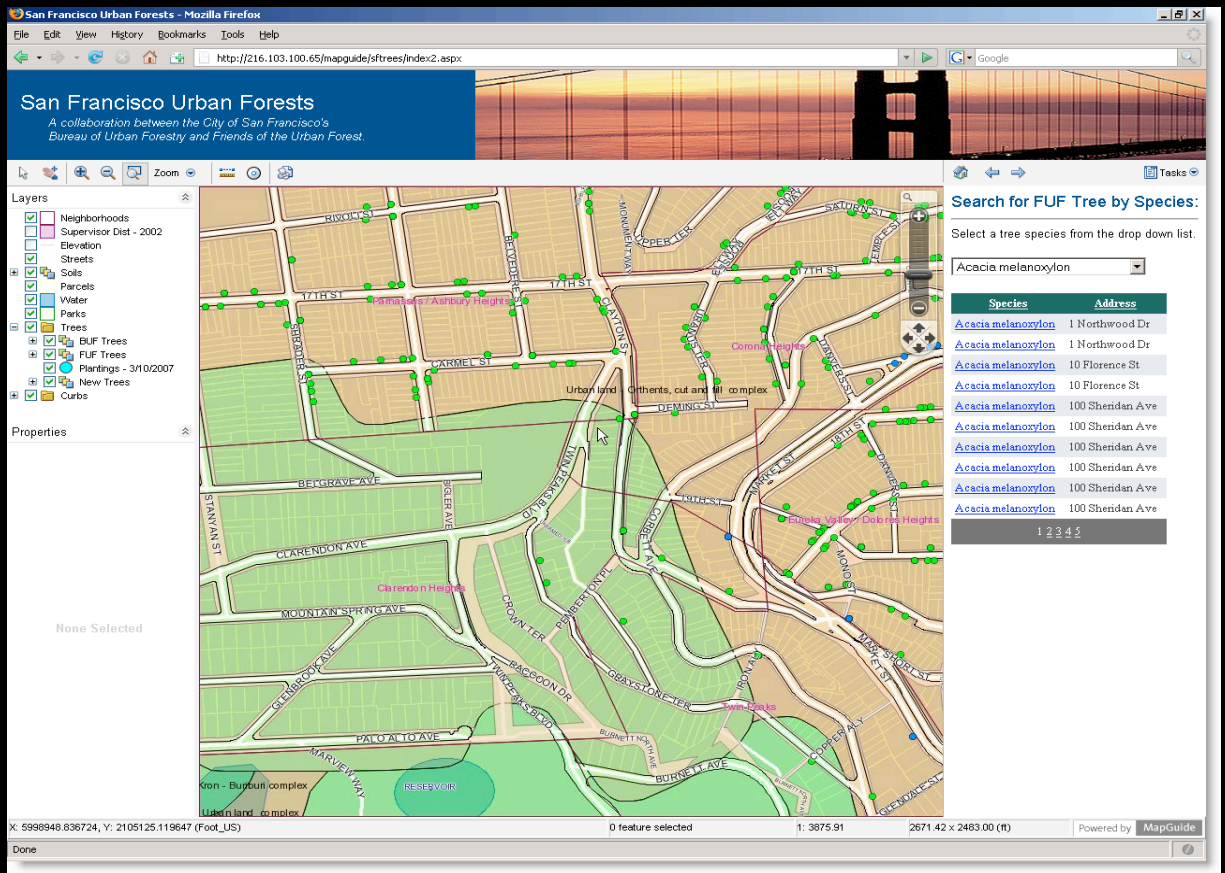
The Urban Forest Map
is a dynamic, web-based,
open source, wiki-like,
mapping application that
integrates tree benefit
data with actual live tree
data in a robust geo database

The prototype (San Francisco Example)




Web Browser (Public UI)
Tree Map
(Centralized Database)
Non Profit Org
(Secure UI)
City Agency
(Secure UI)
Tree Data
Synchronized
Tree Data
Synchronized
The
Structure
Non Profit Org
Database
City Agency
Database

The user interface is dynamic and easy-to-use

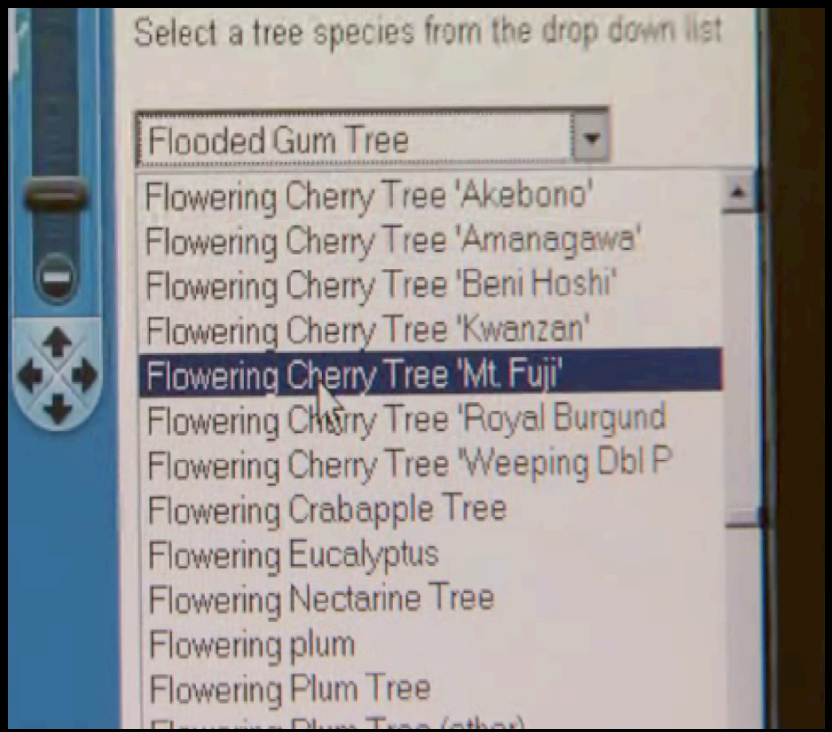


Non-Geek/Lay-Person Translation

- Mapping application = software that maps data
- Open Source = Non proprietary
- Web based = access to database via internet
- Dynamic = updates in real time
- Robust database = can store hundreds of thousands of data entries
- This tool = very geeky and very cool

What data can lay-people provide?

- Species information (70%) accuracy.
- DBH
- General health and condition
- Problems or hazards
- Location
- Photographs
- Interesting anecdotal information



Successes and Challenges

Successes

- Prototype Completion
- Community Support
- Political support
- Financial Support
- Marketing
- Public attention

Challenges

- Servers support (bureaucracy)
- Data access permission (bureaucracy)
- Altering business protocols (bureaucracy)
- Politics

The next steps . . . Version 1.2

- Implementing V 1.2 and the new UI
- Adding new features, such as polygon editing and fundraising tool.
- Expanding query options
- Graphically integrate tree values
- Public outreach campaign to engage residents in adding information
- Developing a nation-wide hosted solution for other cities in USA
- Ongoing open source community input

What does it take to implement in other cities?

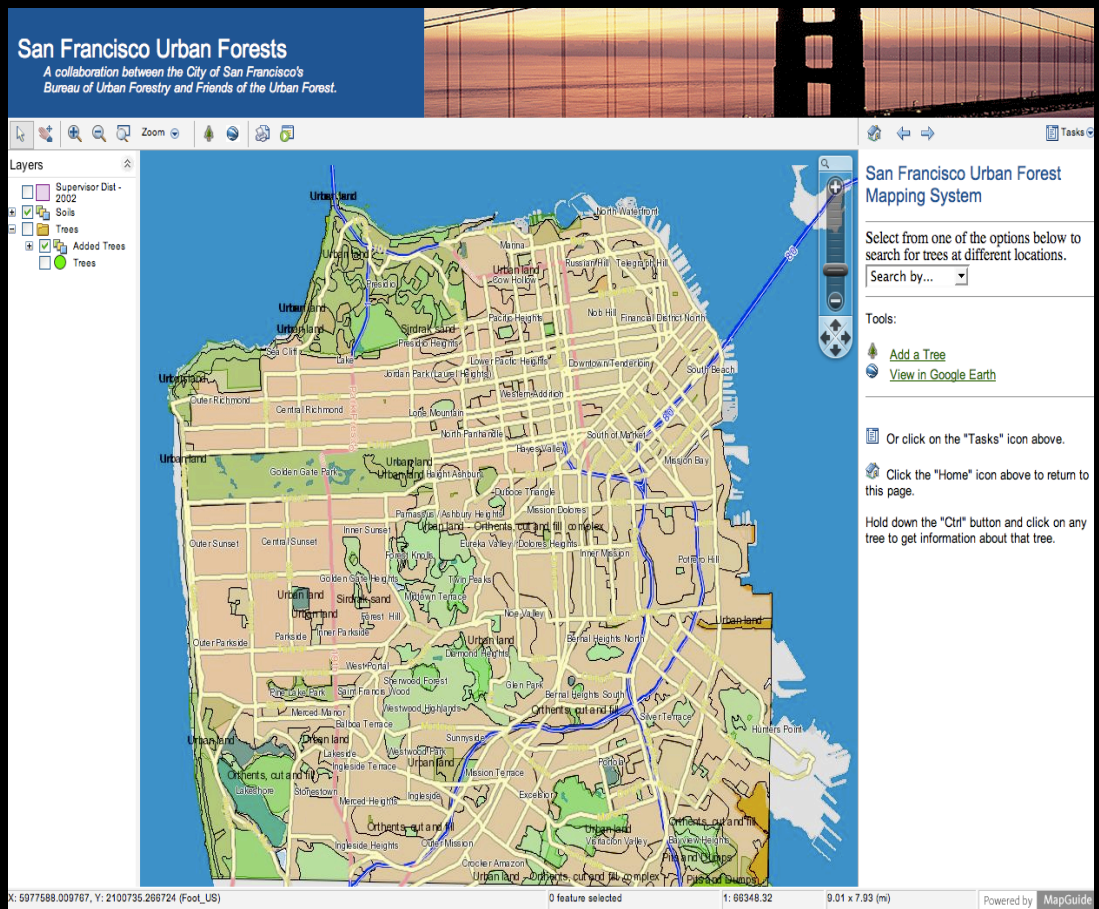
- Top down approach - establish a national program with a centrally hosted application.

- Bottom up approach - city by city, work with local groups to get connected.

What is needed to get started?

Most important:

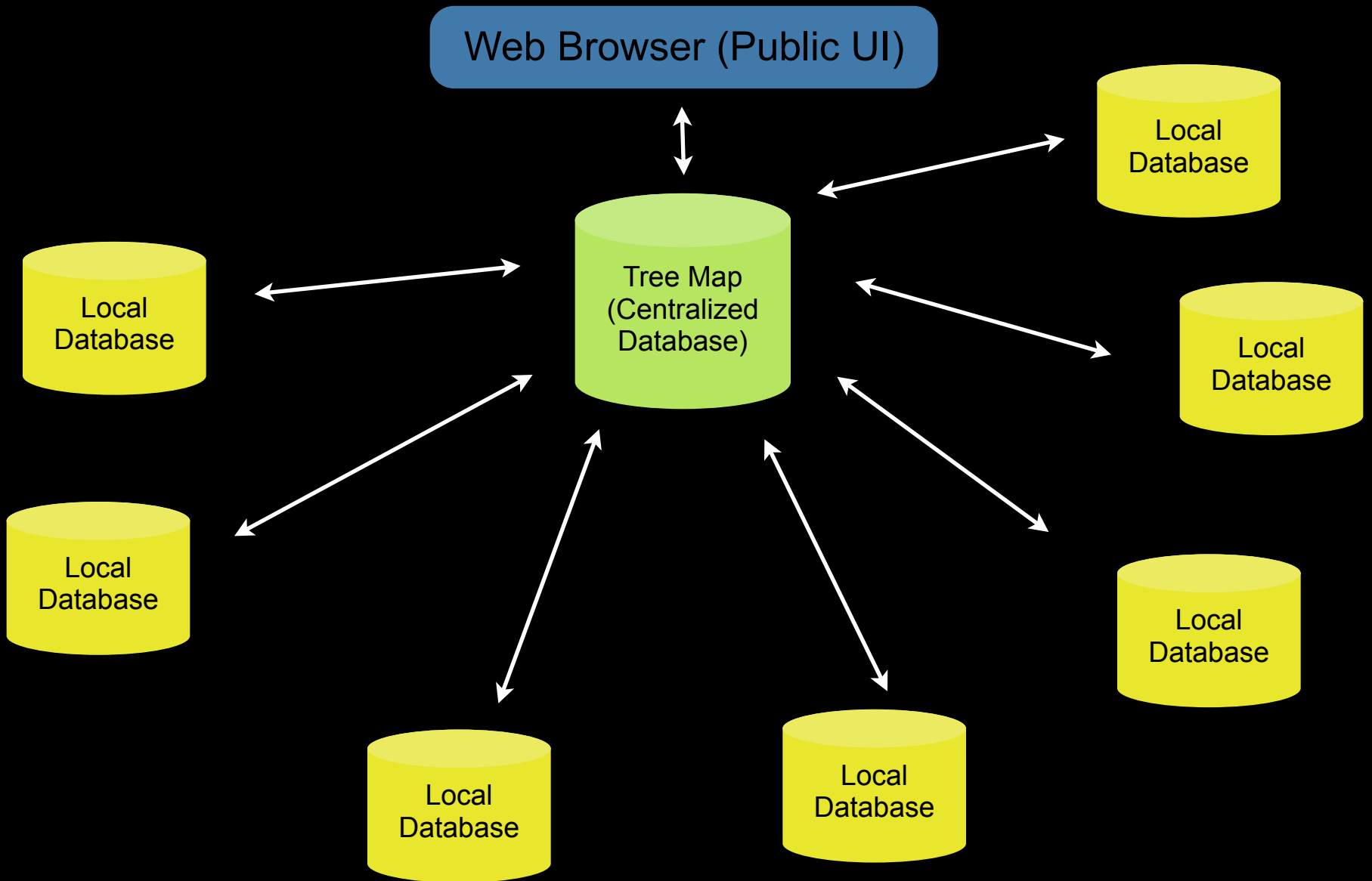
- Server space
- GIS street data
- Parcel data
- Volunteer support
- Outreach capacity
- Data administrator



Great to have:

- Land use data
- Soil data
- Underground Infrastructure data
- Money

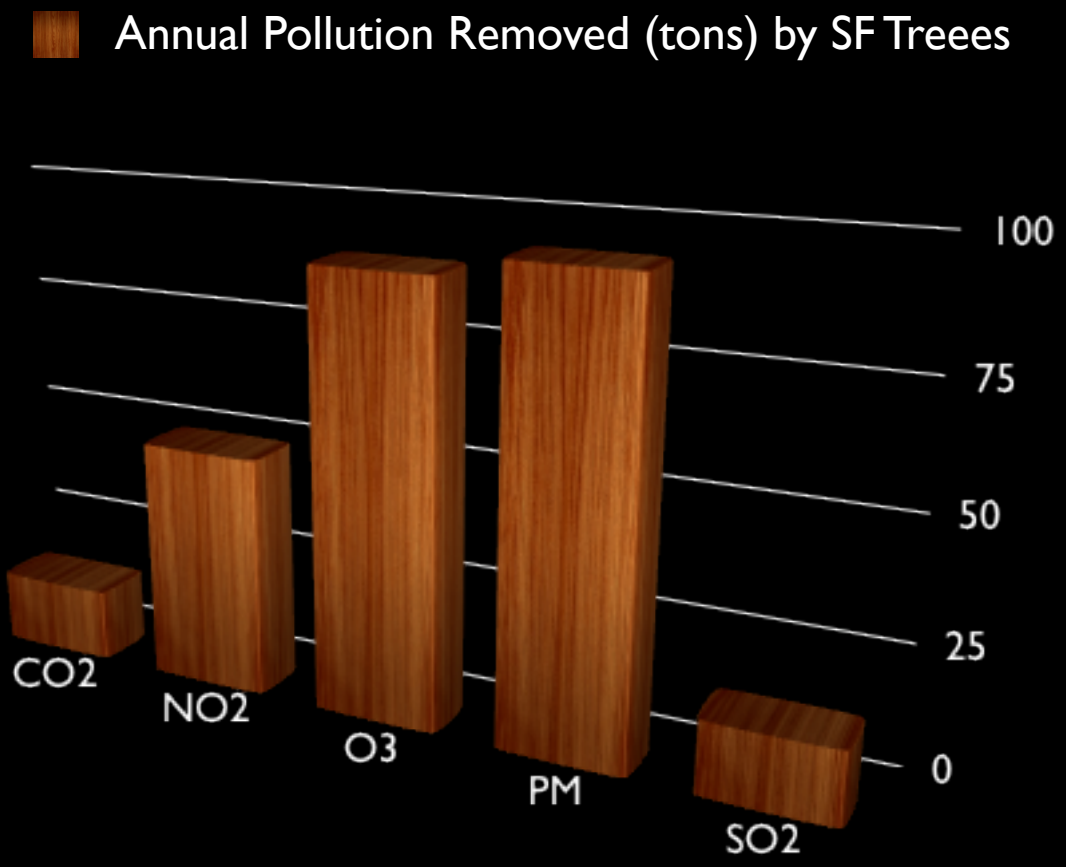
National Scale



Imagine if every human understood the true value of each tree . . .

And then viewed a map of it

Sure, removing pollution is nice . . .



But what is the real benefit?

Benefits to Forest Management

- Increase efficiency in program management
- Analyze/compare costs and benefits of urban forestry programs
- Assess the environmental impact of trees
- Effectively manage natural assets
- Conduct species population trends and analysis

Benefits to Government Business Processes

- Reduce costs and save money through increasing staff efficiency, work flow efficiency and project management efficiency
- Streamline interagency business processes
- Calculate the costs and benefits of the urban forest.

Benefits to Education

- Engage public in community planning processes
- Elementary and Secondary curriculum potential
- Expands reach of science centers and educational institutions
- Provides data for researchers
- Learning opportunities for tree aficionados

Benefits to Public Relations

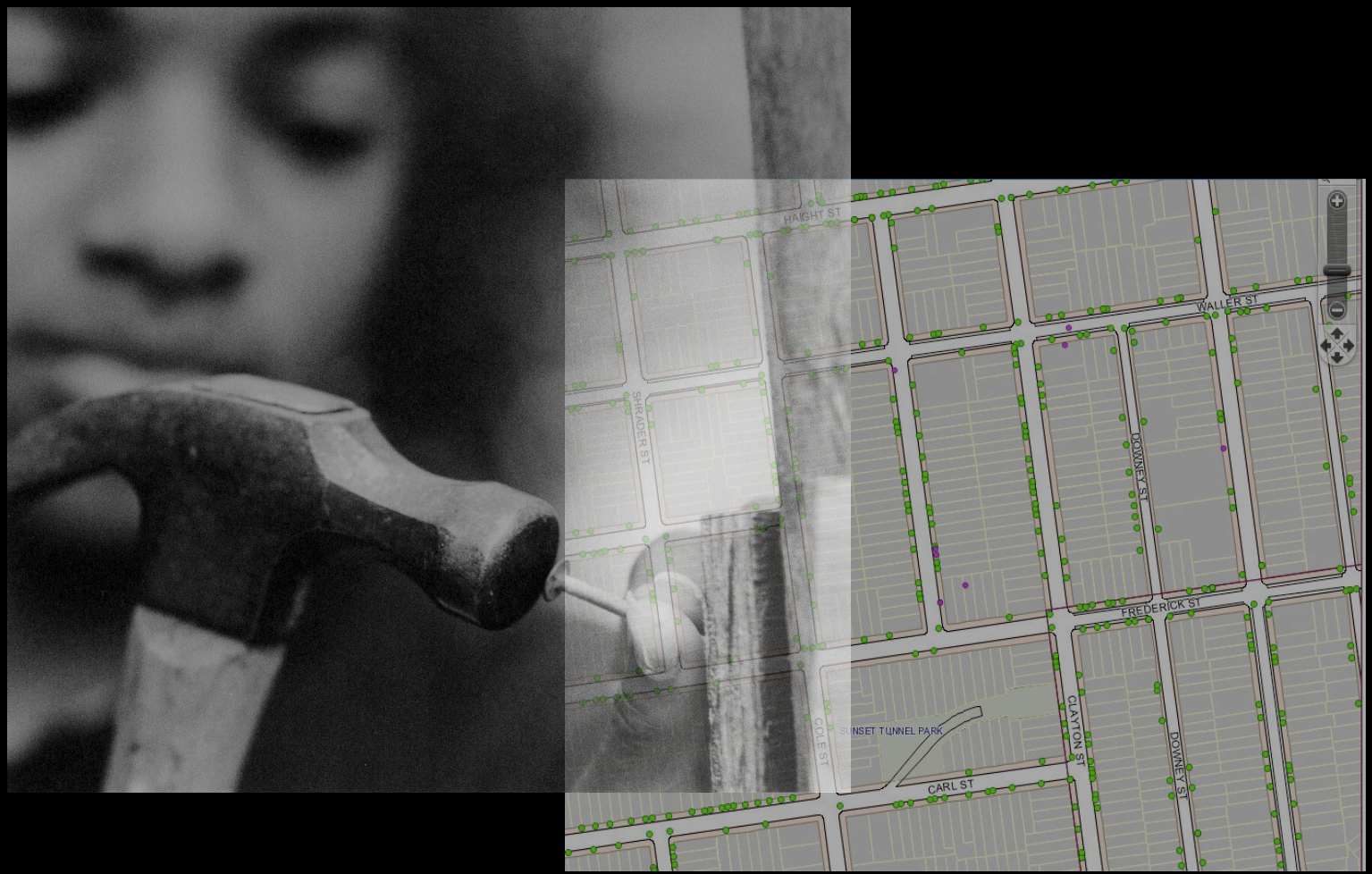
- Foster corporate, non-profit and government partnerships
- Make climate and ecology data relevant to individuals and communities
- Facilitate cross agency communication and cooperation
- Inspire and facilitate individual stewardship

Benefits to Forestry Policy

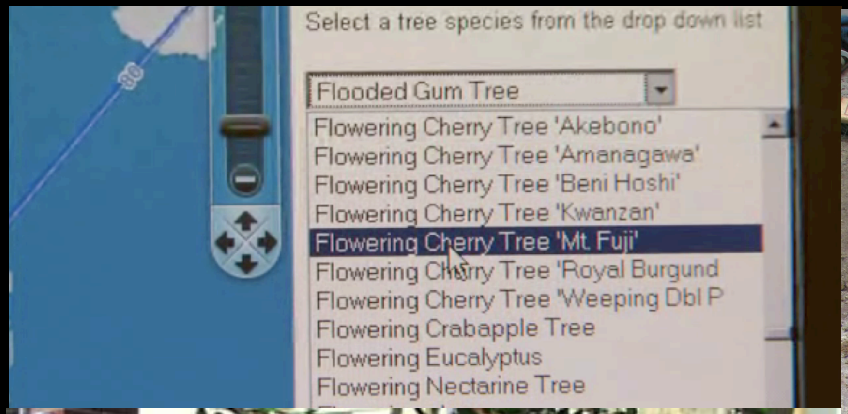
- Galvanize public and political support for government sponsored ecology management programs
- Make climate and ecology data relevant to policy makers and politicians
- Increase government transparency

What is it really about?

Building Community



Teaching our children



Creating Community Partnerships

We can turn . . .

This . . .


ESIGN
FFECTS
NTRANCE
1140
FOLSOM
REAR
ENTRANCE
PARKING
ONE WAY
BAY LIGHTING & DESIGN
OPEN TO THE PUBLIC

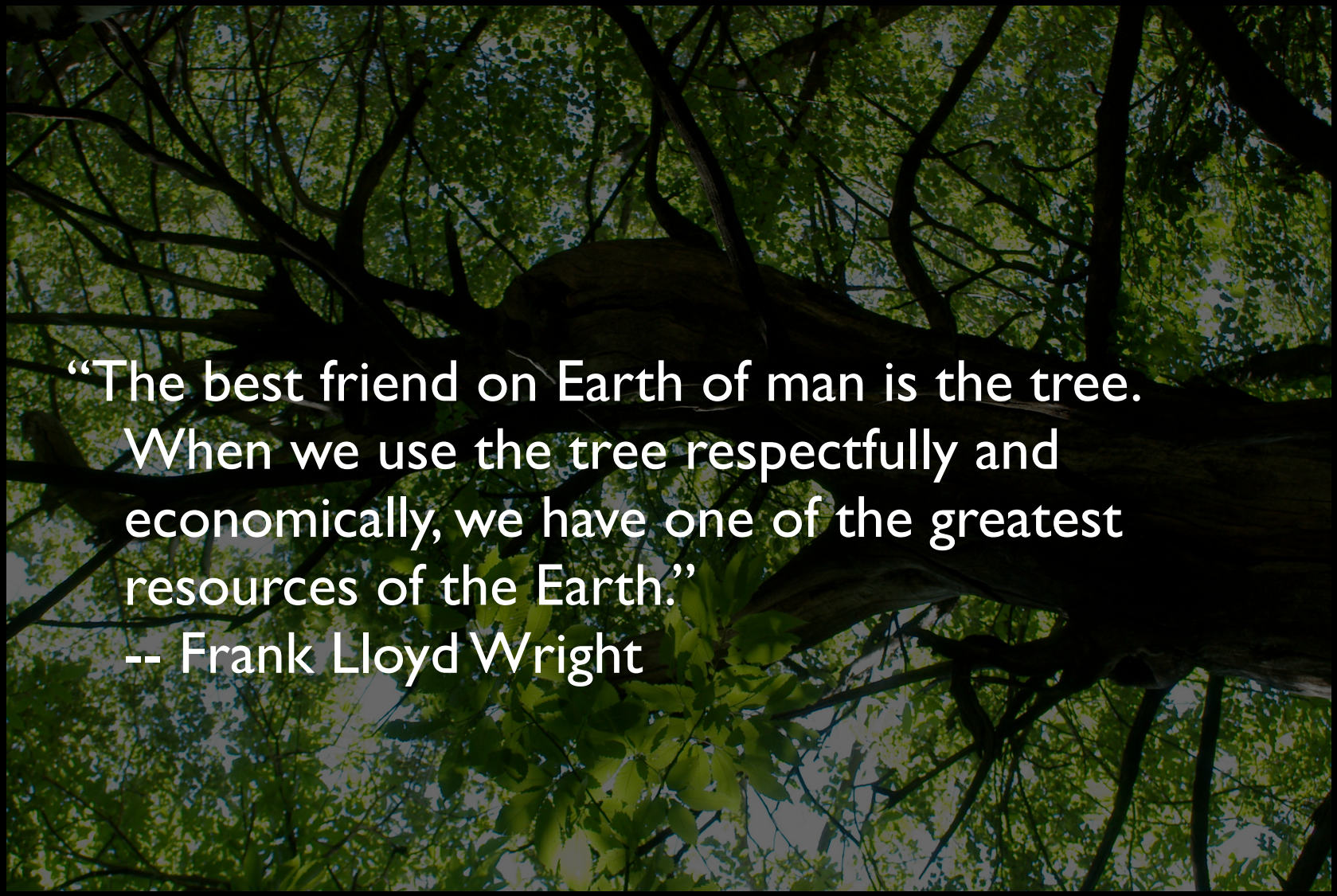
Into This


ESIGN
FFECTS
NTRANCE
1140
FOLSOM
REAR
ENTRANCE
PARKING
RAUSCH
ONE WAY
BAY

Or This . . .

Into This

For a greener future


"The best friend on Earth of man is the tree.
When we use the tree respectfully and
economically, we have one of the greatest
resources of the Earth."
-- Frank Lloyd Wright